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DATE MAILED: 02/15/2005

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------------------|-------------|----------------------|---------------------|------------------|--|
| 10/691,276 | 10/22/2003 | Helmut Heinzmann | V010278.US | 4928 | |
| 759 | 02/15/2005 | | EXAM | INER | |
| Todd T. Taylor Taylor & Aust. P.C. | | | ALVO, N | ALVO, MARC S | |
| 142 S. Main Street | | | ART UNIT | PAPER NUMBER | |
| P.O. Box 560 | | | 1731 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|
| | 10/691,276 | HEINZMANN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Steve Alvo | 1731 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 15 No. | ovember 2004. | | | | | |
| , - | ∑ This action is FINAL. 2b) This action is non-final. | | | | | |
| • | , | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-15 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | • | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10) The drawing(s) filed on is/are: a) acc | epted or b) \square objected to by the (| Examiner. | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | priority under 35 U.S.C. § 119(a) |)-(d) or (f). | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachmont/s) | | | | | | |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal F 6) Other: | Patent Application (PTO-152) | | | | |
| . spo. 110(0) | -/ | . <u> </u> | | | | |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-12, 14 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over KLUNGNESS et al (5,223,090).

KLUNGNESS et al teaches loading a pulp fiber (chemical pulp, column 5, line 67 and column 1, lines 58-60 for kraft or sulfite) by way of a chemical precipitation reaction by adding CaO or CaOH (column 6, line 38) to the pulp and then reacting with carbon dioxide to from precipitated calcium carbonate (column 6, lines 54-55) and drying the pulp, prior to shipment (column 6, lines 60-63). See, column 5, line 50 fro dry content of 95%; see column 6, line 58 for refining after loading; see column 6, line 62 for making a paper web. Any difference, none are felt to exist, would have been an obvious modification over KLUNGNESS et al.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over KLUNGNESS et al as applied to claim1 above, and further in view of DRUMMOND (6,602,385) or PITKANEN et al (6,436,238).

PITKANEN teaches making filled pulp from peroxide bleached mechanical pulp (column 4, lines 26-38 and column 6, lines 10-19). It would have been obvious to use peroxide to

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bleach the pulp of KLUNGNESS et al prior to adding the calcium carbonate as such is taught by PITKANEN et al. Or DRUMMOND teaches peroxide bleaching (column 2, lines 59-67) pulp filled with calcium carbonate. It would have been obvious to brighten the calcium carbonate filled pulp of KLUNGNESS et al by bleaching with peroxide in the manner taught by DRUMMOND.

Claims 13 is rejected under 35 U.S.C. 103 (a) as being unpatentable over KLUNGNESS et al (5,223,090) in view of CRAIG (2,599,093).

KLUNGNESS et al teaches drying the pulp, prior to shipment (column 6, lines 60-63). CRAIG teaches drying the pulp into rolls or laps (bales) for storage and shipment (column 4, lines 62-68). Obviously the dried pulp of KLUNGNESS could be rolled or baled for the shipment, to save space during shipment, as such is conventional as evidenced by CRAIG.

Claims 1-3 and 6-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over CRAIG et al (2,599,093) in view of KLUNGNESS et al (5,223,090).

CRAIG teaches producing pulp in the production of a fiber web, e.g. paper (column 2, lines 16-23), by loading the pulp fiber, e.g. bleached and refined sulfite or sulfate pulp (column 2, lines 24-35) with calcium carbonate by way of a chemical precipitation (column 2, lines 48-57); and drying the pulp into rolls or laps (bales) for storage and shipment (column 4, lines 62-68). See CRAIG, column 4, lines 50-56 for drying to a moisture content of 5-10% (dry content of 90-95%). If necessary, it is obvious the fiber of CRAIG can be a pulp as column 2, lines 24-35 teaches that the fibers include papermaking pulps. KLUNGNESS et al is an improvement over the CRAIG process and teaches by using calcium hydroxide or calcium oxide and adding carbon dioxide to precipitate calcium carbonate instead of the calcium chloride and sodium carbonate of

CRAIG, to improve the strength of the pulp and to eliminate the need for washing out unwanted salts (KLUNGNESS et al, column 4, lines 17-38). It would have been obvious top substitute the calcium oxide and adding carbon dioxide of KLUNGNESS et al to improve the strength of the pulp and to eliminate the need for washing out unwanted salts. Claim 12 is rejected, as chemical pulping is a cooking operation.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over CRAIG (2,599,093) in view of as KLUNGNESS et al applied to claim 3 above, and further in view of DRUMMOND (6,602,385) or PITKANEN et al (6,436,238).

CRAIG teaches that the pulp may be bleached (column 2, line 29). PITKANEN teaches making filled pulp from peroxide bleached mechanical pulp (column 4, lines 26-38 and column 6, lines 10-19). It would have been obvious to use peroxide to bleach the pulp of CRAIG prior to adding the calcium carbonate as such is taught by PITKANEN et al. Or DRUMMOND teaches peroxide bleaching (column 2, lines 59-67) pulp filled with calcium carbonate. It would have been obvious to brighten the calcium carbonate filled pulp of CRAIG and/or KLUNGNESS et al by bleaching with peroxide in the manner taught by DRUMMOND.

The argument that CRAIG et al '093 does not teach the newly claimed "adding at least one of a calcium oxide or a calcium hydroxide to the pulp and treating the pulp with carbon dioxide" is not convincing as newly applied KLUNGNESS et al teaches this feature as set forth in the rejections above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application
Information Retrieval (PAIR) system. Status information for published applications may be obtained
from either Private PAIR or Public PAIR. Status information for unpublished applications is available
through Private PAIR only. For more information about the PAIR system, see http://pairdirect.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Steve Alvo Primary Examiner Art Unit 1731

msa